

School of Engineering and Natural Sciences / Industrial Engineering (English)

2023 - 2024 Academic Year

OCCUPATIONAL HEALTH and SAFETY II

Syllabus

| Course Description | | | | | |
|---|--|--------------------------------|-------------------------|---------------------------|-------------|
| Name | Code | Semester | T+A Hour | Credit | ECTS |
| OCCUPATIONAL HEALTH and SAFETY II | İGV4211500 | Spring Semester | 2+0 | 2 | 2 |
| Prerequisites Courses | | | | | |
| Recommended Elective Courses | | | | | |
| Language of Instruction | English | | | | |
| Course Level | First Cycle (Bachelor's Degree) | | | | |
| Course Type | Required | | | | |
| Course Coordinator | Assoc.Prof. Atakan MANGIR | | | | |
| Name of Lecturer(s) | Assist.Prof. Işık Ateş KIRAL | | | | |
| Assistant(s) | | | | | |
| Aim | This course aims to provide participants with a comprehensive knowledge of workplace safety hazards and equip them with the skills and strategies needed to prevent and mitigate these hazards. By combining theoretical understanding with practical applications, participants will be prepared to establish and maintain a culture of safety in their workplaces. This course is designed to provide participants with in-depth knowledge of workplace hazards and the preventive measures to ensure a safe and secure working environment. Participants will learn to identify, assess, and mitigate various workplace risks and promote a culture of safety within their organizations. | | | | |
| Course Content | This course contains; Orientation,Introduction,Safety Training and Education,Mechanical Hazards and Machine Safeguarding,Falling, Impact, Acceleration, Lifting, and Vision Hazards with Appropriate PPE,Hazards of Temperature Extremes,Pressure Hazards,Electrical Hazards,Fire Hazards and Life Safety - (1),Fire Hazards and Life Safety - (2),Noise and Vibration Hazards - (1),Noise and Vibration Hazards - (2),Industrial Hygiene and Confined Spaces - (1),Industrial Hygiene and Confined Spaces - (2). | | | | |
| Course Learning Outcomes | | | Teaching Methods | Assessment Methods | |
| Explain the significance of safety training and its contribution to hazard prevention. | | | 10, 13, 14, 16, 9 | A | |
| Describe the principles and techniques of machine safeguarding for injury prevention. | | | 10, 13, 14, 16, 9 | A | |
| Recognize and assess risks related to falling, impact, acceleration, lifting, and vision hazards. | | | 10, 13, 14, 16, 9 | A | |
| Implement strategies for managing temperature-related risks in the workplace. | | | 10, 13, 14, 16, 9 | A | |
| Outline safety measures and best practices for handling pressure-related risks. | | | 10, 13, 14, 16, 9 | A | |
| Demonstrate knowledge of safe electrical work practices. | | | 10, 13, 14, 16, 9 | A | |
| Explain the importance of life safety measures in the event of a fire. | | | 10, 13, 14, 16, 9 | A | |
| Understand the risks associated with confined spaces and the procedures for safe entry and work. | | | 10, 13, 14, 16, 9 | A | |
| Teaching Methods | 10: Discussion Method, 13: Case Study Method, 14: Self Study Method, 16: Question - Answer Technique, 9: Lecture Method | | | | |
| Assessment Methods | A: Traditional Written Exam | | | | |
| Lecture Schedule | | | | | |
| Sequence | Topics | Preliminary Preparation | | | |
| 1 | Orientation | Previewing Lecture Notes | | | |
| 2 | Introduction | Previewing Lecture Notes | | | |
| 3 | Safety Training and Education | Previewing Lecture Notes | | | |
| 4 | Mechanical Hazards and Machine Safeguarding | Previewing Lecture Notes | | | |
| 5 | Falling, Impact, Acceleration, Lifting, and Vision Hazards with Appropriate PPE | Previewing Lecture Notes | | | |
| 6 | Hazards of Temperature Extremes | Previewing Lecture Notes | | | |
| 7 | Pressure Hazards | Previewing Lecture Notes | | | |
| 8 | Electrical Hazards | Previewing Lecture Notes | | | |
| 9 | Fire Hazards and Life Safety - (1) | Previewing Lecture Notes | | | |
| 10 | Fire Hazards and Life Safety - (2) | Previewing Lecture Notes | | | |
| 11 | Noise and Vibration Hazards - (1) | Previewing Lecture Notes | | | |
| 12 | Noise and Vibration Hazards - (2) | Previewing Lecture Notes | | | |
| 13 | Industrial Hygiene and Confined Spaces - (1) | Previewing Lecture Notes | | | |
| 14 | Industrial Hygiene and Confined Spaces - (2) | Previewing Lecture Notes | | | |
| Evaluation Methods | | Weight(%) | | | |
| Midterm Exam | | 30 | | | |
| General Exam | | 70 | | | |

| Resources |
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| Goetsch, D. L. (2015). Occupational safety and health for technologists. Pearson Education Limited. Lecture Notes. |